



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

**MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION**

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www.miamidade.gov/economy

Commercial Innovations, Inc.
9105 Way Ave.
Cleveland, OH 44105

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER - Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code including the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: Solar Brite Single Ply Roof Systems over Steel Decks.

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA renews NOA # 12-1102.05 and consists of pages 1 through 61.
The submitted documentation was reviewed by Alex Tigera.



NOA No.: 15-1007.12
Expiration Date: 01/05/21
Approval Date: 12/31/15
Page 1 of 61

ROOFING SYSTEM APPROVAL

Category: Roofing
Sub-Category: Single Ply
Material: KEE
Deck Type: Steel
Maximum Design Pressure -105 psf

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Solar Brite EV, Solar Brite	Various	ASTM D 6754	KEE, polyester reinforced, single ply membrane
Solar Brite EVFB, Solar Brite FB	Various	ASTM D 6754	KEE, fleece-backed, polyester reinforced, single ply membrane
LA432 Bonding Adhesive		Proprietary	Two side "contact" bonding adhesive
LA432M Bonding Adhesive		Proprietary	Solvent based bonding adhesive
FA561M Water Borne Adhesive		Proprietary	One side "substrate only" fleece back solvent based adhesive
FA636 Water Borne Adhesive		Proprietary	One side "substrate only" fleece backed water based adhesive
Millennium One Step™ Foamable Adhesive		Proprietary	Elastomeric, One step foamable adhesive
Tuff Trac	0.080" x 28" or 56" x 43' 1/4" x 24" x 48"	N/A	Vinyl walk way Vinyl protection pad



APPROVED INSULATIONS:

TABLE 2

<u>Product Name</u>	<u>Product Description</u>	<u>Manufacturer (With Current NOA)</u>
ACFoam–II, ACFoam-IV	Polyisocyanurate insulation	Atlas Roofing Corporation
ACFoam Composite	Polyisocyanurate insulation with perlite facer	Atlas Roofing Corporation
EnergyGuard RA Composite	Polyisocyanurate foam insulation with high density fiberboard or perlite insulation	GAF
DensDeck, DensDeck Prime	Silicon treated gypsum	Georgia-Pacific Gypsum LLC
Type X Gypsum	Gypsum Wallboard	Generic
Ultra-Max, Multi-Max FA-3	Polyisocyanurate foam insulation	Rmax Operating, LLC
Thermarroof Composite-3, Tapered Thermarroof-3	Polyisocyanurate/perlite composite insulation	Rmax Operating, LLC
SECUROCK Gypsum-Fiber Roof Board	Gypsum Coverboard	USG Corporation
SECUROCK Glass-Mat Roof Board	Gypsum Coverboard	USG Corporation
H-Shield, H-Shield CG, H-Shield WF, H-Shield NB	Polyisocyanurate insulation	Hunter Panels, LLC
ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF 25 PSI, ENRGY 3 CGF 25 PSI, R-Panel, Fesco Foam	Polyisocyanurate insulation	Johns Manville Corporation
ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm AGF 25 PSI, ValuTherm CGF 25 PSI	Polyisocyanurate insulation	Johns Manville Corporation
DuraBoard, Retro-Fit Board, Fesco Board, Fesco Board HD	Expanded mineral fiber board	Johns Manville Corporation
RetroPlus Board	Perlite insulation	Johns Manville Corporation
Structodek High Density Fiberboard	Wood fiberboard	Blue Ridge Fiberboard, Inc.
High Density Roof Fiberboard	Wood Fiber insulation board	Generic



APPROVED FASTENERS:

TABLE 3

<u>Fastener Number</u>	<u>Product Name</u>	<u>Product Description</u>	<u>Dimensions</u>	<u>Manufacturer (With Current NOA)</u>
1.	Dekfast 14	Membrane fastener	Various	SFS Intec, Inc.
2.	Dekfast 1.5" x 2.5" Oval Barbed Plate	Galvalume AZ50 stress plate	1.5" x 2.5"	SFS Intec, Inc.
3.	Dekfast Galvalume Steel Round 2-3/8 in 20-Ga. Barbed Plate	Barbed, galvalume AZ50 stress plate	2-3/8" Dia.	SFS Intec, Inc.
4.	Dekfast Isofast IF-2.375-AT Membrane Plate	Galvalume AZ50 stress plate, #15 belted fasteners	2-3/8" Dia.	SFS Intec, Inc.
5.	Dekfast Fasteners	Insulation and membrane fasteners	Various	SFS Intec, Inc.
6.	Dekfast Galvalume Steel Hex	Galvalume AZ50 steel plate	2 7/8" x 3 1/4"	SFS Intec, Inc.
7.	OMG Heavy Duty	Self-drilling fastener for use in steel, wood or concrete decks	Various	OMG, Inc.
8.	OMG 3-in Galvalume Steel Plate	Galvalume coated steel plate	3" round	OMG, Inc.
9.	OMG 3-in Ribbed Galvalume Plate	Galvalume coated steel plate	3" round	OMG, Inc.
10.	Dekfast 15 HS	Self-drilling, carbon fastener	Various	SFS Intec, Inc.
11.	OMG ASAP Fastener	Preassembled fastener and plate	3" round	OMG, Inc.
12.	Flat Bottom Metal Plate	Aluminized steel plate	3" square	OMG, Inc.
13.	#12 Standard Roofgrip	Steel fastener for use in steel and wood decks	Various	OMG, Inc.
14.	Dekfast 1.5" x 2.75" Oval Barbed Plate	Oval stress plate	1 1/2" x 2 3/4"	SFS Intec, Inc.
15.	Trufast #21 SHD Fasteners	Insulation fastener for wood, steel and concrete decks	Various	Altenloh, Brinck & Co. U.S., Inc.
16.	Trufast #15 EHD fasteners	Insulation fastener for wood, steel and concrete decks	Various	Altenloh, Brinck & Co. U.S., Inc.
17.	Trufast 2-3/4" Barbed Metal Seam Plate (EHD)	AZ-55 Galvalume steel stress plate	2.75" round	Altenloh, Brinck & Co. U.S., Inc.
18.	Dekfast Galvalume Steel 3" Round	Galvalume AZ50 stress plate	3" round	SFS Intec, Inc.
19.	Trufast #12 DP Fastener	Tru-Kote PC-3 coated, carbon steel fastener	Various	Altenloh, Brinck & Co. U.S., Inc.
20.	Trufast 3" Metal Insulation Plate	Galvalume AZ50 stress plate	3.23" round	Altenloh, Brinck & Co. U.S., Inc.

APPROVED FASTENERS:**TABLE 3**

<u>Fastener Number</u>	<u>Product Name</u>	<u>Product Description</u>	<u>Dimensions</u>	<u>Manufacturer (With Current NOA)</u>
21.	OMG 3-in Galvalume Steel Plate	Galvalume coated steel plate	3" round	OMG, Inc.
22.	OMG 3-in Ribbed Galvalume Plate	Galvalume coated steel plate	3" round	OMG, Inc.
23.	#12 Standard Roofgrip	CR-10 coated, carbon steel fastener	Various	OMG, Inc.
24.	Trufast #14 HD Fastener	Insulation fastener for steel and wood decks	Various	Altenloh, Brinck & Co. U.S., Inc.
25.	Accutrac Hextra	Carbon steel fastener	Various	OMG, Inc.
26.	Accutrac Flat Bottom	Galvalume steel plate	3" square	OMG, Inc.
27.	ASAP RoofGrip Pre-Assembled System	Pre-assembled system consisting of Roofgrip fasteners and plates	Various	OMG, Inc.
28.	OMG XHD	Self-drilling fastener for use in steel or wood decks	Various	OMG, Inc.
29.	#15 Roofgrip	Carbon steel fastener	Various	OMG, Inc.
30.	RhinoBond Insulation Plate (PVC)	Polymeric coated plate used to heat weld membrane.	3" round	OMG, Inc.
31.	RhinoBond TreadSafe Plate (PVC)	Polymeric coated plate used to heat weld membrane.	3" round	OMG, Inc.
32.	RhinoBond (Retro) Driller	Carbon steel fastener with CR-10 coating	Various	OMG, Inc.

EVIDENCE SUBMITTED:

<u>Test Agency/Identifier</u>	<u>Name</u>	<u>Report</u>	<u>Date</u>
Factory Mutual Research Corp.	FM 4470	1Z2A5.AM	01/12/96
	FM 4470	1Z3A8.AM	08/13/97
	FM 4470	3003251	10/15/99
	FM 4470	3006872	06/13/00
	FM 4470	3009071	01/03/02
	FM 4470	3014050	07/08/03
	FM 4470	3038211	06/30/10
	FM 4470	3036192	11/23/09
	FM 4470	3028651	04/17/08
	FM 4470	3033396	09/04/09
	FM 4470	3030785	08/12/08
	FM 4470	3037168	04/12/10
	FM 4470	3037770	10/22/09
	FM 4470	3013125	09/23/03
	FM 4470	3013068	09/23/03
	FM 4470	3023458	07/18/06
	FM 4470	3026964	07/25/07
	FM 4470	3033314	08/26/08
	FM 4470	3003689	09/22/99
	FM 4470	3044075	04/06/12
	FM 4470	3046131	10/17/12
	FM 4470	3048494	11/19/13
	FM 4470	3045983	10/18/12
	FM 4470	3051607	03/25/15
Underwriters Laboratories	UL 790	98NK12810	08/11/98
	UL 790	98NK17212	08/21/98
	UL 790	12CA39420	01/08/13
Exterior Research & Design, LLC	TAS 114	4015.10.96-1-R1	07/20/10
	TAS 114	4006.07.97-1-R1	07/15/10
	TAS 114	4006.08.00-1-R1	10/18/05
	TAS 114	02843.02.05-08	02/04/05
	TAS 114/117	C12410.08.09	08/14/09
	TAS 117 & ASTM D6862	C850SC.11.07-R1	08/07/09
	FM 4470 / TAS 114	S32410.09.10	09/21/10
	FM 4470 / TAS 114	S44050.09.13	09/10/13
PRI Construction Materials Technologies LLC	ASTM D 6754	S47410.12.14	12/15/14
	ASTM D 3747	HGC-142-02-03	02/09/12

DECK STRESS ANALYSIS CALCULATIONS/REPORTS

<u>Engineer/Agency</u>	<u>Identifier</u>	<u>Assemblies</u>	<u>Date</u>
Robert Nieminen, P.E.	Signed/Sealed Calculations	D(2), D(20)	
FM Approval Deck Limitation	RoofNav Listing	B(4), B(6), B(7), C(4) through C(13), D(1), D(3), D(4), D(5), D(7) through D(19), D(22), D(23)	11/23/15



APPROVED ASSEMBLIES

Membrane Type:	Single Ply, KEE
Deck Type 2I:	Steel Decks, Insulated
Deck Description:	Min. 18-22 ga. steel deck
System Type B(1):	Base layer of insulation mechanically attached, top layer adhered; membrane adhered

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Barrier: Sopravap'r, self-adhered.
(Optional)

One or more layers of the following insulations:

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ACFoam-II, H-Shield, ENRGY 3, Multi-Max FA-3 Minimum 1.5" thick	5 (#12) with 6	1:2 ft ²
DensDeck, DensDeck Prime Minimum 1/4" thick	5 (#12) with 6	1:2 ft ²

Note: Insulation layer shall be mechanically attached with fasteners and density described above. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density (See Roofing Application Standard RAS 117 for fastening details).

Membrane: Solar Brite roof cover adhered to the insulation with with FA 636 water based adhesive at 0.66 to 0.71 gal/sq or with LA 432M Bonding Adhesive applied to substrate and cover at 0.5 gal/sq.
Or
Solar Brite EVFB or Solar Brite FB roof cover adhered to the insulation with FA 636 water based adhesive at 0.83 to 1 gal/sq.

Maximum Design Pressure: -45 psf (See General Limitation #9.)



Membrane Type: Single Ply, KEE
Deck Type 2I: Steel Decks, Insulated
Deck Description: Min. 18-22 ga. steel deck
System Type B(2): Base layer of insulation mechanically attached, top layer adhered; membrane adhered

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
SECUROCK Gypsum-Fiber Roof Board Minimum 0.5" thick	1, 7, 5, 13, 28, 29	1:4 ft ²

Note: Base layer shall be mechanically attached with fasteners and density described above. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density (See Roofing Application Standard RAS 117 for fastening details).

Vapor Barrier: Soprapap'r, self-adhered over SECUROCK Gypsum-Fiber Roof Board.
(Optional)

<u>Middle Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ENRGY-3 Minimum 1.5" thick	N/A	N/A

<u>Top Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
SECUROCK Gypsum-Fiber Roof Board Minimum 0.25" thick	N/A	N/A

Note: Apply insulation layer in a ¾" to 1" wide beads 12" o.c. of Millennium One Step™ Foamable Insulation Adhesive. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

Membrane: Solar Brite EVFB or Solar Brite FB roof cover adhered with approved asphalt at 20-25 lbs./sq., spatter-applied 3M Polyurethane Foam Insulation Adhesive CR-20, FA 561M solvent adhesive at 1 gal/sq. or FA 636 water based adhesive at 0.83 gal/sq. Laps are sealed with 1.5-inch heat weld.
 Or
 Solar Brite EV roof cover adhered with LA 432 Bonding Adhesive or LA 432M Bonding Adhesive applied at an application rate 0.5 gal/sq. Laps are sealed with 1.5-inch heat weld.
 Or



Solar Brite roof cover adhered with approved asphalt at 20-25 lbs./sq. or FA 636 water based adhesive at 0.66 gal/sq. Laps are sealed with 1.5-inch heat weld.

**Maximum Design
Pressure:**

-45 psf (See General Limitation #9.)



Membrane Type: Single Ply, KEE
Deck Type 2I: Steel Decks, Insulated
Deck Description: Min. 18-22 ga. steel deck
System Type B(3): Base layer of insulation mechanically attached, top layer adhered; membrane adhered

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Barrier: Soprapap'r, self-adhered.
(Optional)

One or more layers of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ACFoam-II, H-Shield, ENRGY 3 Minimum 2" thick	1, 7 or 5 (#14)	1:2.67 ft ²

Note: Base layer shall be mechanically attached with fasteners and density described above. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density (See Roofing Application Standard RAS 117 for fastening details).

<u>Top Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
SECUROCK Gypsum-Fiber Roof Board Minimum 0.25" thick	N/A	N/A

Note: Apply top layer of insulation in a full mopping of any approved mopping hot asphalt within the EVT range and at a rate of 25 lbs/100 ft² or Olybond applied in a full coating application of 1gal/100 ft² or ¾" to 1" wide beads 12" o.c. of Olybond 500, Millennium One Step™ Foamable Insulation Adhesive or Insta-Stik Adhesive. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

Membrane: Solar Brite EV or Solar Brite roof cover adhered to the insulation with LA 432 Bonding Adhesive or LA 432M Bonding Adhesive applied at an application rate of 50 ft²/gal. Laps are sealed with 1.5-inch heat weld.
 Or
 Solar Brite EVFB or Solar Brite FB roof cover adhered to the insulation with approved asphalt at 20-25 lbs./sq., FA 561M solvent adhesive at 90 ft²/gal or FA 636 water based adhesive at 100 ft²/gal. Laps are sealed with 1.5-inch heat weld.

Maximum Design Pressure: -45 psf (See General Limitation #9.)



Membrane Type: Single Ply, KEE

Deck Type 2I: Steel Decks, Insulated

Deck Description: Min. 18-22 ga., Type B, Grade 33 steel deck secured to minimum ¼" thick structural supports spaced 6' o.c. with Traxx/5 fasteners spaced 6" o.c. along the center of the supports. Deck side laps are secured 24" o.c. with Traxx/1 fasteners.
This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type B(4): Base layer of insulation mechanically attached, top layer adhered; membrane adhered

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Barrier: Vaportite, self-adhered.
(Optional)

One or more layers of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ACFoam-II, H-Shield, ENRGY 3 Minimum 2" thick	1, 5 (#14) or 7	1:1.33 ft ²

Note: Base layer shall be mechanically attached with fasteners and density described above. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density (See Roofing Application Standard RAS 117 for fastening details).

<u>Top Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
SECUROCK Gypsum-Fiber Roof Board Minimum 0.25" thick	N/A	N/A

Note: Apply top layer of insulation in a full mopping of any approved mopping hot asphalt within the EVT range and at a rate of 25 lbs/100 ft² or ¾" to 1" wide beads 6" o.c. of Olybond 500, Millennium One Step™ Foamable Insulation Adhesive or Insta-Stik Adhesive. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

Membrane: Solar Brite EV or Solar Brite roof cover adhered to the insulation with LA 432 Bonding Adhesive or LA 432M Bonding Adhesive applied at an application rate of 50 ft²/gal. Laps are sealed with 1.5-inch heat weld.

Or

Solar Brite EVFB or Solar Brite FB roof cover adhered to the insulation with approved asphalt at 20-25 lbs./sq., FA 561M solvent adhesive at 90 ft²/gal or FA 636 water based adhesive at 100 ft²/gal. Laps are sealed with 1.5-inch heat weld.

Maximum Design Pressure: -60 psf (See General Limitation #7.)



Membrane Type: Single Ply, KEE
Deck Type 2I: Steel Decks, Insulated
Deck Description: 18-22 ga. steel deck
System Type B(5): Base layer of insulation mechanically attached, top layer adhered; membrane adhered

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Barrier: Soprapap'r, self-adhered.
(Optional) Or
 Any UL or FM approved vapor retarder applied to the roof deck or over a base layer of insulation.

Fire Barrier: Min. ¼" DensDeck or DensDeck Prime applied to the base or top insulation layer in a full mopping of approved hot asphalt within the EVT range and at a rate of 20-40 lbs./100 ft² or in ¾" to 1" wide beads 12" o.c. of Millenium One Step Foamable Adhesive or Insta-Stik Adhesive or OlyBond Adhesive Fastener at application rate of 1gal/100 ft² or Type X Gypsum applied in ¾" to 1" wide beads of Insta-Stik Adhesive, 12" o.c.

One or more layers of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ACFoam-II, Multi-Max FA-3, H-Shield		
Minimum 1.5" thick	1 or 5 (#14)	1:2 ft ²
Minimum 2" thick	1 or 5 (#14)	1:4 ft ²
DensDeck, DensDeck Prime		
Minimum 0.25" thick	1 or 5 (#14)	1:2 ft ²

Note: Base layer shall be mechanically attached with fasteners and density described above. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density (See Roofing Application Standard RAS 117 for fastening details).

<u>Top Insulation Layer (Optional)</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ACFoam-II, Multi-Max FA-3, H-Shield		
Minimum 1.5" thick	N/A	N/A

Note: Apply optional top layer of insulation in a full mopping of any approved mopping hot asphalt within the EVT range and at a rate of 20-40 lbs/100 ft² or in ¾" to 1" wide beads 12" o.c. of Millenium One Step Foamable Adhesive or Insta-Stik Adhesive or OlyBond Adhesive Fastener at application rate of 1gal/100 ft². Refer to Roofing Application Standard RAS 117 and insulation adhesive manufacturer's Roofing Component Product Control Approval for insulation attachment requirements. Insulations listed as base layer shall be used only as base layers with an optional top layer insulation installed as the final membrane substrate.



Membrane:	Solar Brite EV or Solar Brite roof cover adhered to the insulation with LA 432 Bonding Adhesive or LA 432M Bonding Adhesive applied at an application rate of 1 gal./sq. to the backside of the membrane and to the substrate. Laps are sealed with 1.5-inch heat weld. Or
	Solar Brite EVFB or Solar Brite FB roof cover adhered to the insulation with approved asphalt at 20-25 lbs./sq., FA 561M solvent adhesive at 1 gal. per 100 ft ² or FA 636 water based adhesive at 100 ft ² /gal. Laps are sealed with 1.5-inch heat weld.
Maximum Design Pressure:	<p>-45 psf (for applications utilizing FleeceBacked membranes) (See General Limitation #9.)</p> <p>-60 psf (for 2" thick insulation attached at 1 fastener per 4 ft² with Solar Brite EV) (See General Limitation #9.)</p> <p>-67.5 psf (for 1.5" thick insulation attached at 1 fastener per 2 ft² with Solar Brite EV) (See General Limitation #9.)</p>

Membrane Type: Single Ply, KEE

Deck Type 2I: Steel Decks, Insulated

Deck Description: Min. 18-22 ga., Type B, Grade 80 steel deck secured to minimum ¼" thick structural supports spaced 6' o.c. with Traxx/5 fasteners spaced 6" o.c. along the center of the supports. Deck side laps are secured 24" o.c. with Traxx/1 fasteners.
This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type B(6): Base layer of insulation mechanically attached, top layer adhered; membrane adhered

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Barrier: Soprapap'r, self-adhered.
(Optional)

One or more layers of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener</u> <u>Density/ft²</u>
ACFoam–II, H-Shield, ENRGY 3 Minimum 2.0" thick	1 with 18 or 5 (#14) with 18	1:2 ft²

Note: Base layer shall be mechanically attached with fasteners and density described above. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density (See Roofing Application Standard RAS 117 for fastening details).

<u>Top Insulation Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener</u> <u>Density/ft²</u>
DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board Minimum 0.25" thick	N/A	N/A

Note: Top insulation shall be adhered with Millenium One Step Foamable Adhesive, TITE-SET Roofing Adhesive or 3M Polyurethane Foam Insulation Adhesive CR-20 in ½" to ¾" wide beads spaced 12" o.c. Refer to Roofing Application Standard RAS 117 and insulation adhesive manufacturer's Roofing Component Product Control Approval for insulation attachment requirements. Insulations listed as base layer shall be used only as base layers with an optional top layer insulation installed as the final membrane substrate.

Membrane: Solar Brite EV or Solar Brite roof cover adhered to the insulation with LA 432M Bonding Adhesive applied at an application rate of 0.5 gal/sq to the backside of the membrane and to the substrate. Laps are sealed with 1.5-inch heat weld.

Or

Solar Brite EVFB or Solar Brite FB roof cover adhered with approved asphalt at 20-25 lbs./sq., spatter-applied 3M Polyurethane Foam Insulation Adhesive CR-20 at 4 lb/sq., FA 561M solvent adhesive at 1 gal/sq. or FA 636 water based adhesive at 0.83 gal/sq. Laps are sealed with 1.5-inch heat weld.



Maximum Design Pressure: -52.5 psf (See General Limitation #7.)



Membrane Type: Single Ply, KEE

Deck Type 2I: Steel Decks, Insulated

Deck Description: Min. 18-22 ga., Type B, Grade 80 steel deck secured to minimum ¼" thick structural supports spaced 6' o.c. with Traxx/5 fasteners spaced 6" o.c. along the center of the supports. Deck side laps are secured 24" o.c. with Traxx/1 fasteners.
This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type B(7): Base layer of insulation mechanically attached, top layer adhered; membrane adhered

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Barrier: Soprapap'r, self-adhered.
(Optional)

One or more layers of the following insulations:

<u>Base Insulation Layer</u>		<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener</u> <u>Density/ft²</u>
ACFoam-II, H-Shield, ENRGY 3			
Fastening #1:	Minimum 2.0" thick	1 with 18 or 5 (#14) with 18	1:1.33 ft ²
Fastening #2:	Minimum 2.0" thick	1 with 18 or 5 (#14) with 18	1:1 ft ²

Note: Base layer shall be mechanically attached with fasteners and density described above. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density (See Roofing Application Standard RAS 117 for fastening details).

<u>Top Insulation Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener</u> <u>Density/ft²</u>
DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board Minimum 0.25" thick	N/A	N/A

Note: Top insulation shall be adhered with Millenium One Step Foamable Adhesive, TITE-SET Roofing Adhesive or 3M Polyurethane Foam Insulation Adhesive CR-20 in ½" to ¾" wide beads spaced 6" o.c. Refer to Roofing Application Standard RAS 117 and insulation adhesive manufacturer's Roofing Component Product Control Approval for insulation attachment requirements. Insulations listed as base layer shall be used only as base layers with an optional top layer insulation installed as the final membrane substrate.



Membrane: Solar Brite EV or Solar Brite roof cover adhered to the insulation with LA 432M Bonding Adhesive applied at an application rate of 0.5 gal/sq to the backside of the membrane and to the substrate. Laps are sealed with 1.5-inch heat weld.

Or

Solar Brite EVFB or Solar Brite FB roof cover adhered with approved asphalt at 20-25 lbs./sq., spatter-applied 3M Polyurethane Foam Insulation Adhesive CR-20 at 4 lb/sq., FA 561M solvent adhesive at 1 gal/sq. or FA 636 water based adhesive at 0.83 gal/sq. Laps are sealed with 1.5-inch heat weld.

Maximum Design Pressure: -67.5 psf for Fastening #1 (See General Limitation #7.)
-90 psf for Fastening #2 (See General Limitation #7.)



Membrane Type: Single Ply, KEE
Deck Type 2I: Steel Decks, Insulated
Deck Description: Min. 18-22 ga. steel deck
System Type C(1): All layers of insulation simultaneously attached; membrane adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Barrier: Soprapap'r, self-adhered.
(Optional)

One or more layers of the following.

<u>Base Insulation Layer (Optional)</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ACFoam-II, H-Shield, ENRGY 3 Minimum 1.5" thick	N/A	N/A
<u>Top Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
SECUROCK Gypsum-Fiber Roof Board Minimum 0.25" thick	1 with 18, 5 (#12 or #14) with 6 or 18, 7 or 13 (#12) with 21, 19 or 24 with 20	1:2 ft ²

Note: All layers shall be simultaneously fastened; see top or base layer above for fasteners and density. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: Solar Brite EV or Solar Brite roof cover adhered to the insulation with LA 432 Bonding Adhesive or LA 432M Bonding Adhesive applied at an application rate of 50 ft²/gal. Laps are sealed with 1.5-inch heat weld.
 Or
 Solar Brite EVFB or Solar Brite FB roof cover adhered to the insulation with approved asphalt at 20-25 lbs./sq., FA 561M solvent adhesive at 90 ft²/gal or FA 636 water based adhesive at 100 ft²/gal. Laps are sealed with 1.5-inch heat weld.

Maximum Design Pressures: -45 psf (See General Limitation #9)



Membrane Type: Single Ply, KEE
Deck Type 2I: Steel Decks, Insulated
Deck Description: Min. 18-22 ga. steel deck.
System Type C(2): All layers of insulation simultaneously attached; membrane adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Barrier: Soprapap'r, self-adhered.
(Optional)

One or more layers of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ACFoam-II, ACFoam-IV, H-Shield, H-Shield CG Minimum 1.5" thick	16 with 20	1:2 ft ²
SECUROCK Gypsum-Fiber Roof Board, DensDeck Prime Minimum 0.25" thick	16 with 20	1:2 ft ²

Note: All layers shall be simultaneously fastened; see top or base layer above for fasteners and density. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: Solar Brite EVFB or Solar Brite FB roof cover fully adhered with spatter-applied 3M Polyurethane Foam Insulation Adhesive CR-20. Laps are sealed with 1.5-inch heat weld.

Maximum Design Pressure: -45.0 psf (See General Limitation #9)



Membrane Type: Single Ply, KEE
Deck Type 2I: Steel Decks, Insulated
Deck Description: Min. 18-22 ga. steel deck
System Type C(3): All layers of insulation simultaneously attached; membrane adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Barrier: Soprapav'r, self-adhered.
(Optional)

One or more layers of the following.

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Retro-Fit Board, RetroPlus Board Minimum 0.5" thick	N/A	N/A
Fesco Board (homogeneous) Minimum 0.75" thick	N/A	N/A
Structodek High Density Fiberboard, DuraBoard, Fesco Board HD Minimum 1" thick	N/A	N/A
ACFoam-II, EnergyGuard RA Composite, H-Shield WF, H-Shield NB, ENRGY-3, ENRGY 3 AGF 25 PSI, ENRGY 3 CGF 25 PSI, R-Panel, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm AGF 25 PSI, ValuTherm CGF 25 PSI, Multi-Max FA-3, Tapered Thermarroof-3, Ultra-Max, Fesco Board (laminated), Fesco Foam Minimum 1.5" thick	N/A	N/A
<u>Top Insulation Layer (Optional)</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
SECUROCK Gypsum-Fiber Roof Board, SECUROCK Glass-Mat Roof Board, DensDeck, DensDeck Prime, H-Shield HD Minimum 0.25" thick	N/A	N/A

Note: All insulation shall have preliminary attachment prior to the application of RhinoBond plates and fasteners as outlined below. See membrane description for fastener details. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: Solar Brite EV or Solar Brite roof cover shall be bonded to RhinoBond Insulation Plates as specified below:

Fastening: Insulation shall be mechanically attached with OMG XHD fasteners and RhinoBond Insulation Plates spaced 2' o.c. in staggered fastener rows spaced 3' o.c. Membrane shall be bonded to RhinoBond Insulation Plates with RhinoBond induction welding tool. Laps are sealed with 1.5-inch heat weld.

Maximum Design Pressures: -45 psf (See General Limitation #9)



Membrane Type: Single Ply, KEE

Deck Type 2I: Steel Decks, Insulated

Deck Description: Min. 18-22 ga., Type B, Grade 33 steel deck attached to ¼” thick structural steel supports spaced min. 6 ft o.c. attached with ITW Buildex Traxx/5 fasteners spaced min. 6 in. o.c. at the supports. Deck side laps secured with ITW Buildex Traxx/1 fasteners spaced max. 24” o.c. **This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.**

System Type C(4): All layers of insulation simultaneously attached; membrane adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Barrier: Soprapap’r, self-adhered.
(Optional)

One or more layers of the following.

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Retro-Fit Board, RetroPlus Board Minimum 0.5” thick	N/A	N/A
Fesco Board (homogeneous) Minimum 0.75” thick	N/A	N/A
Structodek High Density Fiberboard, DuraBoard, Fesco Board HD Minimum 1” thick	N/A	N/A
ACFoam-II, EnergyGuard RA Composite, H-Shield WF, H-Shield NB, ENRGY-3, ENRGY 3 AGF 25 PSI, ENRGY 3 CGF 25 PSI, R-Panel, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm AGF 25 PSI, ValuTherm CGF 25 PSI, Multi-Max FA-3, Tapered Thermarroof-3, Ultra-Max, Fesco Board (laminated), Fesco Foam Minimum 1.5” thick	N/A	N/A
<u>Top Insulation Layer (Optional)</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
SECUROCK Gypsum-Fiber Roof Board, SECUROCK Glass-Mat Roof Board, DensDeck, DensDeck Prime, H-Shield HD Minimum 0.25” thick	N/A	N/A

Note: All insulation shall have preliminary attachment prior to the application of RhinoBond plates and fasteners as outlined below. See membrane description for fastener details. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.



Membrane:	Solar Brite EV or Solar Brite roof cover shall be bonded to RhinoBond Insulation Plates as specified below:
Fastening #1:	<p>Insulation shall be mechanically attached with OMG XHD fasteners and RhinoBond Insulation Plates spaced 12" o.c. in fastener rows spaced 60" o.c. Membrane shall be bonded to RhinoBond Insulation Plates with RhinoBond induction welding tool. Laps are sealed with 1.5-inch heat weld.</p> <p><i>(Maximum Design Pressure: -52.5 psf. (See General Limitation #7))</i></p>
Fastening #2:	<p>Insulation shall be mechanically attached with OMG XHD fasteners and RhinoBond Insulation Plates spaced 6" o.c. in fastener rows spaced 60" o.c. Membrane shall be bonded to RhinoBond Insulation Plates with RhinoBond induction welding tool. Laps are sealed with 1.5-inch heat weld.</p> <p><i>(Maximum Design Pressure: -60.0 psf. (See General Limitation #7))</i></p>
Maximum Design Pressures:	See Fastening Options Above

Membrane Type: Single Ply, KEE

Deck Type 2I: Steel Decks, Insulated

Deck Description: Min. 18-22 ga., Type B, Grade 80 steel attached to structural steel supports spaced max. 6 ft o.c. attached with ITW Buildex Traxx/5 fasteners spaced max. 6 in. o.c. at each rib. Deck side laps secured with ITW Buildex Traxx/1 fasteners spaced max. 12" o.c.
This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table

System Type C(5): All layers of insulation simultaneously attached; membrane adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Barrier: VaportTite, self-adhered.
(Optional)

One or more layers of the following.

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ACFoam-IV (Flat or Tapered) Minimum 2.0" thick	13 (#12), 23 (#12) with 12, 21, 22 or 25 with 26 or 27	1:1.3 ft ²

Note: All layers shall be simultaneously fastened; see above for fasteners and density. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: Solar Brite EV or Solar Brite roof cover adhered to the insulation with LA 432 Bonding Adhesive or LA 432M Bonding Adhesive applied at an application rate of 50 ft²/gal.

Maximum Design Pressures: -60.0 psf (See General Limitation #7)



Membrane Type: Single Ply, KEE

Deck Type 2I: Steel Decks, Insulated

Deck Description: Min. 18-22 ga., Type B, Grade 80 steel attached to structural steel supports spaced max. 6 ft o.c. attached with ITW Buildex Traxx/5 fasteners and steel washers spaced max. 6 in. o.c. at each rib. Deck side laps secured with ITW Buildex Traxx/1 fasteners spaced max. 12" o.c. **This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.**

System Type C(6): All layers of insulation simultaneously attached; membrane adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Barrier: Soprapap'r, self-adhered.
(Optional)

One or more layers of the following.

<u>Insulation Layer</u>		<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener</u> <u>Density/ft²</u>
ACFoam-IV (Flat or Tapered)			
Fastening #1:	Minimum 2.0" thick	13 (#12), 23 (#12) with 12, 21, 22 or 25 with 26 or 27	1:2.67 ft ²
Fastening #2:	Minimum 2.0" thick	13 (#12), 23 (#12) with 12, 21, 22 or 25 with 26 or 27	1:2 ft ²
Fastening #3:	Minimum 2.0" thick	13 (#12), 23 (#12) with 12, 21, 22 or 25 with 26 or 27	1:1.3 ft ²
Fastening #4:	Minimum 2.0" thick	13 (#12), 23 (#12) with 12, 21, 22 or 25 with 26 or 27	1:1 ft ²

Note: All layers shall be simultaneously fastened; see above for fasteners and density. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: Solar Brite EV or Solar Brite roof cover adhered to the insulation with LA 432 Bonding Adhesive or LA 432M Bonding Adhesive applied at an application rate of 50 ft²/gal.

Maximum Design Pressures:

- 60.0 psf for Fastening #1 (See General Limitation #7)
- 75.0 psf for Fastening #2 (See General Limitation #7)
- 120.0 psf for Fastening #3 (See General Limitation #7)
- 172.5 psf for Fastening #4; **18-20 ga. Steel Deck** (See General Limitation #7)



Membrane Type: Single Ply, KEE

Deck Type 2I: Steel Decks, Insulated

Deck Description: Min. 18-22 ga., Type B, Grade 80 steel deck attached to structural steel supports spaced max. 6 ft o.c. attached with ITW Buildex Traxx/5 fasteners spaced max. 6 in. o.c. at each rib. Deck side laps secured with ITW Buildex Traxx/1 fasteners spaced max. 24" o.c.
This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type C(7): All layers of insulation simultaneously attached; membrane adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Barrier: VaportTite, self-adhered.
(Optional)

One or more layers of the following.

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Retro-Fit Board, RetroPlus Board Minimum 0.5" thick	N/A	N/A
Fesco Board (homogeneous) Minimum 0.75" thick	N/A	N/A
Structodek High Density Fiberboard, DuraBoard, Fesco Board HD Minimum 1" thick	N/A	N/A
ACFoam-II, EnergyGuard RA Composite, H-Shield WF, H-Shield NB, ENRGY-3, ENRGY 3 AGF 25 PSI, ENRGY 3 CGF 25 PSI, R-Panel, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm AGF 25 PSI, ValuTherm CGF 25 PSI, Multi-Max FA-3, Tapered Thermarroof-3, Ultra-Max, Fesco Board (laminated), Fesco Foam Minimum 1.5" thick	N/A	N/A
<u>Top Insulation Layer (Optional)</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
SECUROCK Gypsum-Fiber Roof Board, SECUROCK Glass-Mat Roof Board, DensDeck, DensDeck Prime, H-Shield HD Minimum 0.25" thick	N/A	N/A

Note: All insulation shall have preliminary attachment prior to the application of RhinoBond plates and fasteners as outlined below. See membrane description for fastener details. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.



Membrane:	Solar Brite EV or Solar Brite roof cover shall be bonded to RhinoBond Insulation Plates as specified below:
Fastening:	Insulation shall be mechanically attached with OMG XHD fasteners and RhinoBond Insulation Plates spaced 2' o.c. in staggered fastener rows spaced 2' o.c. Membrane shall be bonded to RhinoBond Insulation Plates with RhinoBond induction welding tool. Laps are sealed with 1.5-inch heat weld.
Maximum Design Pressures:	-67.5 psf (See General Limitation #7)



Membrane Type: Single Ply, KEE

Deck Type 2I: Steel Decks, Insulated

Deck Description: Min. 20 ga., Type B, Grade 33 steel deck attached to 1/4" thick structural steel supports spaced max. 6 ft o.c. attached with ITW Buildex Traxx/5 fasteners spaced min. 6 in. o.c. at the supports. Deck side laps secured with ITW Buildex Traxx/1 fasteners spaced max. 24" o.c. **This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.**

System Type C(8): All layers of insulation simultaneously attached; membrane adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Barrier: Soprapap'r, self-adhered.
(Optional)

One or more layers of the following.

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Retro-Fit Board, RetroPlus Board Minimum 0.5" thick	N/A	N/A
Fesco Board (homogeneous) Minimum 0.75" thick	N/A	N/A
Structodek High Density Fiberboard, DuraBoard, Fesco Board HD Minimum 1" thick	N/A	N/A
ACFoam-II, EnergyGuard RA Composite, H-Shield WF, H-Shield NB, ENRGY-3, ENRGY 3 AGF 25 PSI, ENRGY 3 CGF 25 PSI, R-Panel, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm AGF 25 PSI, ValuTherm CGF 25 PSI, Multi-Max FA-3, Tapered Thermarroof-3, Ultra-Max, Fesco Board (laminated), Fesco Foam Minimum 1.5" thick	N/A	N/A
<u>Top Insulation Layer (Optional)</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
SECUROCK Gypsum-Fiber Roof Board, SECUROCK Glass-Mat Roof Board, DensDeck, DensDeck Prime, H-Shield HD Minimum 0.25" thick	N/A	N/A

Note: All insulation shall have preliminary attachment prior to the application of RhinoBond plates and fasteners as outlined below. See membrane description for fastener details. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.



Membrane:	Solar Brite EV or Solar Brite roof cover shall be bonded to RhinoBond Insulation Plates as specified below:
Fastening:	Insulation shall be mechanically attached with OMG XHD fasteners and RhinoBond Insulation Plates spaced 6" o.c. in fastener rows spaced 60" o.c. Membrane shall be bonded to RhinoBond Insulation Plates with RhinoBond induction welding tool. Laps are sealed with 1.5-inch heat weld.
Maximum Design Pressures:	-75.0 psf (See General Limitation #7)



Membrane Type: Single Ply, KEE

Deck Type 2I: Steel Decks, Insulated

Deck Description: Min. 22 ga., Type B, Grade 33 steel deck attached to ¼” thick structural steel supports spaced max. 6 ft o.c. attached with ITW Buildex Traxx/5 fasteners spaced min. 6 in. o.c. at the supports. Deck side laps secured with ITW Buildex Traxx/1 fasteners spaced max. 24” o.c. **This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.**

System Type C(9): All layers of insulation simultaneously attached; membrane adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Barrier: Soprapap'r, self-adhered.
(Optional)

One or more layers of the following.

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Retro-Fit Board, RetroPlus Board Minimum 0.5” thick	N/A	N/A
Fesco Board (homogeneous) Minimum 0.75” thick	N/A	N/A
Structodek High Density Fiberboard, DuraBoard, Fesco Board HD Minimum 1” thick	N/A	N/A
ACFoam-II, EnergyGuard RA Composite, H-Shield WF, H-Shield NB, ENRGY-3, ENRGY 3 AGF 25 PSI, ENRGY 3 CGF 25 PSI, R-Panel, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm AGF 25 PSI, ValuTherm CGF 25 PSI, Multi-Max FA-3, Tapered Thermarroof-3, Ultra-Max, Fesco Board (laminated), Fesco Foam Minimum 1.5” thick	N/A	N/A
<u>Top Insulation Layer (Optional)</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
SECUROCK Gypsum-Fiber Roof Board, SECUROCK Glass-Mat Roof Board, DensDeck, DensDeck Prime, H-Shield HD Minimum 0.25” thick	N/A	N/A

Note: All insulation shall have preliminary attachment prior to the application of RhinoBond plates and fasteners as outlined below. See membrane description for fastener details. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.



Membrane:	Solar Brite EV or Solar Brite roof cover shall be bonded to RhinoBond Insulation Plates as specified below:
Fastening:	Insulation shall be mechanically attached with OMG XHD fasteners and RhinoBond Insulation Plates spaced 6" o.c. in fastener rows spaced 48" o.c. Membrane shall be bonded to RhinoBond Insulation Plates with RhinoBond induction welding tool. Laps are sealed with 1.5-inch heat weld.
Maximum Design Pressures:	-82.5 psf (See General Limitation #7)



Membrane Type: Single Ply, KEE

Deck Type 2I: Steel Decks, Insulated

Deck Description: Min. 18-22 ga., Type B (*See Maximum Design Pressure below for steel strength*) steel deck secured to 1/4" structural supports spaced 6' with Traxx/5 fasteners spaced 6" o.c. Deck side laps secured with Traxx/1 fasteners spaced 24" o.c.
This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type C(10): All layers of insulation simultaneously attached; membrane adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Barrier: Soprapap'r, self-adhered.
(Optional)

Fire Barrier: (*Only if using XPS*) Minimum 1/4" thick SECUROCK Gypsum-Fiber Roof Board, DensDeck
(Optional) or DensDeck Prime, loose-laid.

One or more layers of the following insulations:

<u>Base Insulation Layer (Optional)</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Approved XPS or any approved polyisocyanurate Listed in Table 2 Minimum 1.5" thick	N/A	N/A
<u>Top Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
SECUROCK Gypsum-Fiber Roof Board, DensDeck Prime Minimum 0.5" thick	19 with 20; 7, 13, 23, 28 or 29 with 8;	1:1 ft ²

Note: All layers shall be simultaneously fastened; see top or base layer above for fasteners and density. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: Solar Brite EVFB or Solar Brite FB roof cover fully adhered with spatter-applied 3M Polyurethane Foam Insulation Adhesive CR-20. Laps are sealed with 1.5-inch heat weld.

Maximum Design Pressure: -82.5 psf (ASTM A653 Grade 33 Steel Deck) (See General Limitation #7.)
-105.0 psf (ASTM A653 Grade 80 Steel Deck) (See General Limitation #7.)



Membrane Type: Single Ply, KEE

Deck Type 2I: Steel Decks, Insulated

Deck Description: Min. 20 ga., Type B, Grade 33 steel deck attached to ¼” thick structural steel supports spaced 6 ft o.c. attached with ITW Buildex Traxx/5 fasteners spaced min. 6 in. o.c. at the supports. Deck side laps secured with ITW Buildex Traxx/1 fasteners spaced max. 24” o.c.
This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type C(11): All layers of insulation simultaneously attached; membrane adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Barrier: Soprapap'r, self-adhered.
(Optional)

One or more layers of the following.

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Retro-Fit Board, RetroPlus Board Minimum 0.5” thick	N/A	N/A
Fesco Board (homogeneous) Minimum 0.75” thick	N/A	N/A
Structodek High Density Fiberboard, DuraBoard, Fesco Board HD Minimum 1” thick	N/A	N/A
ACFoam-II, EnergyGuard RA Composite, H-Shield WF, H-Shield NB, ENRGY-3, ENRGY 3 AGF 25 PSI, ENRGY 3 CGF 25 PSI, R-Panel, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm AGF 25 PSI, ValuTherm CGF 25 PSI, Multi-Max FA-3, Tapered Thermarroof-3, Ultra-Max, Fesco Board (laminated), Fesco Foam Minimum 1.5” thick	N/A	N/A
<u>Top Insulation Layer (Optional)</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
SECUROCK Gypsum-Fiber Roof Board, SECUROCK Glass-Mat Roof Board, DensDeck, DensDeck Prime, H-Shield HD Minimum 0.25” thick	N/A	N/A

Note: All insulation shall have preliminary attachment prior to the application of RhinoBond plates and fasteners as outlined below. See membrane description for fastener details. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.



Membrane:	Solar Brite EV or Solar Brite roof cover shall be bonded to RhinoBond Insulation Plates as specified below:
Fastening:	Insulation shall be mechanically attached with OMG XHD fasteners and RhinoBond Insulation Plates spaced 6" o.c. in fastener rows spaced 60" o.c. Membrane shall be bonded to RhinoBond Insulation Plates with RhinoBond induction welding tool. Laps are sealed with 1.5-inch heat weld.
Maximum Design Pressures:	-90.0 psf (See General Limitation #7)



Membrane Type: Single Ply, KEE

Deck Type 2I: Steel Decks, Insulated

Deck Description: Min. 18 ga., Type B, Grade 33 steel deck attached to ¼” thick structural steel supports spaced 6 ft o.c. attached with ITW Buildex Traxx/5 fasteners spaced min. 6 in. o.c. at the supports. Deck side laps secured with ITW Buildex Traxx/1 fasteners spaced max. 24” o.c.
This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type C(12): All layers of insulation simultaneously attached; membrane adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Barrier: Soprapap'r, self-adhered.
(Optional)

One or more layers of the following.

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Retro-Fit Board, RetroPlus Board Minimum 0.5” thick	N/A	N/A
Fesco Board (homogeneous) Minimum 0.75” thick	N/A	N/A
Structodek High Density Fiberboard, DuraBoard, Fesco Board HD Minimum 1” thick	N/A	N/A
ACFoam-II, EnergyGuard RA Composite, H-Shield WF, H-Shield NB, ENRGY-3, ENRGY 3 AGF 25 PSI, ENRGY 3 CGF 25 PSI, R-Panel, ValuTherm, ValuTherm AGF, ValuTherm CGF, ValuTherm AGF 25 PSI, ValuTherm CGF 25 PSI, Multi-Max FA-3, Tapered Thermarroof-3, Ultra-Max, Fesco Board (laminated), Fesco Foam Minimum 1.5” thick	N/A	N/A
<u>Top Insulation Layer (Optional)</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
SECUROCK Gypsum-Fiber Roof Board, SECUROCK Glass-Mat Roof Board, DensDeck, DensDeck Prime, H-Shield HD Minimum 0.25” thick	N/A	N/A

Note: All insulation shall have preliminary attachment prior to the application of RhinoBond plates and fasteners as outlined below. See membrane description for fastener details. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.



Membrane:	Solar Brite EV or Solar Brite roof cover shall be bonded to RhinoBond Insulation Plates as specified below:
Fastening:	Insulation shall be mechanically attached with OMG XHD fasteners and RhinoBond Insulation Plates spaced 6" o.c. in fastener rows spaced 60" o.c. Membrane shall be bonded to RhinoBond Insulation Plates with RhinoBond induction welding tool. Laps are sealed with 1.5-inch heat weld.
Maximum Design Pressures:	-90.0 psf (See General Limitation #7)



Membrane Type: Single Ply, KEE

Deck Type 2I: Steel Decks, Insulated

Deck Description: Min. 18-20 ga., Type B, Grade 33 steel deck secured to structural supports spaced 6' o.c. with Traxx/5 fasteners spaced 6" o.c. Deck side laps secured with Traxx/1 fasteners spaced 24" o.c.
This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type C(13): All layers of insulation simultaneously attached; membrane adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Barrier: Soprapap'r, self-adhered.
(Optional)

One or more layers of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Approved XPS Minimum 1.5" thick	N/A	N/A
<u>Top Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
SECUROCK Gypsum-Fiber Roof Board, DensDeck Prime Minimum 0.5" thick	19 with 20	1:1 ft ²

Note: All layers shall be simultaneously fastened; see above for fasteners and density. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: Solar Brite EVFB or Solar Brite FB roof cover fully adhered with spatter-applied 3M Polyurethane Foam Insulation Adhesive CR-20. Laps are sealed with 1.5-inch heat weld.

Maximum Design Pressure: -97.5 psf (See General Limitation #7.)



Membrane Type: Single Ply, KEE

Deck Type 2I: Steel, Insulated

Deck Description: Min. 22 ga., ASTM A653, Grade 80 steel deck attached to structural steel supports spaced max. 6 ft o.c. attached with ITW Buildex Traxx/5 fasteners spaced max. 6 in. o.c. at each rib. Deck side laps secured with ITW Buildex Traxx/1 fasteners spaced max. 24" o.c.
This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type D(1): Membrane mechanically attached over preliminary fastened insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

<u>Insulation Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener</u> <u>Density/ft²</u>
H-Shield Minimum 1.5" thick	N/A	N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Membrane: Solar Brite EV, Solar Brite, Solar Brite EVFB or Solar Brite FB secured through the preliminarily attached insulation with Dekfast 15 HS fasteners and Dekfast Galvalume Steel Round 2-3/8in 20-GA Barbed Plates, spaced 6" o.c. within the 6" laps in rows spaced 95" o.c. The side laps are sealed with a minimum 1.5" heat weld.

Maximum Design Pressures: -45.0 psf (See General Limitation #7)



Membrane Type: Single Ply, KEE

Deck Type 2I: Steel, Insulated

Deck Description: Min. 18 ga., Type B, Grade 40 steel deck attached to structural supports spaced max. 7 ft o.c. attached with 5/8" puddle welds spaced max. 6 in. o.c. Deck side laps secured with Tek/1 fasteners spaced max. 18" o.c.
This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type D(2): Membrane mechanically attached over preliminary fastened insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
H-Shield Minimum 1.5" thick	N/A	N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Membrane: Solar Brite EV, Solar Brite, Solar Brite EVFB or Solar Brite FB secured through the preliminarily attached insulation with Dekfast 15 HS fastener with Dekfast 1.5" x 2.75" Oval Barbed Plates, spaced 6" o.c. within the 5" laps in rows spaced 69" o.c. The side laps are sealed with a minimum 1.5" heat weld.

Maximum Design Pressures: -45.0 psf (See General Limitation #7).



Membrane Type: Single Ply, KEE

Deck Type 2I: Steel, Insulated

Deck Description: 16-22 ga., ASTM A653, Grade 33 steel deck attached to structural supports spaced max. 6 ft o.c. attached with ITW Buildex Traxx/5 fasteners spaced max. 6 in. o.c. at each rib. Deck side laps secured with ITW Buildex Traxx/1 fasteners spaced max. 24" o.c.
This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type D(3): Membrane mechanically attached over preliminary fastened insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ENRGY 3 Minimum 1.5" thick	N/A	N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Membrane: Solar Brite EV, Solar Brite, Solar Brite EVFB or Solar Brite FB secured through the preliminarily attached insulation with Dekfast 15 HS fastener with Dekfast 1.5" x 2.5" Oval Barbed Plates or Dekfast 1.5" x 2.75" Oval Barbed Plates, spaced 12" o.c. within the 5" laps in rows spaced 69" o.c. The side laps are sealed with a minimum 1.5" heat weld.

Maximum Design Pressures: -45.0 psf (See General Limitation #7).



Membrane Type: Single Ply, KEE

Deck Type 2I: Steel, Insulated

Deck Description: 18-22 ga., ASTM A653 SS, Grade 80 or A1008 SS Grade 80 steel deck attached to structural supports spaced max. 6 ft o.c. attached with ITW Buildex Traxx/5 fasteners spaced max. 6 in. o.c. at supports (one fastener was installed at each bearing attachment). Deck side laps secured with ITW Buildex Traxx/1 fasteners spaced max. 24" o.c.
This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type D(4): Membrane mechanically attached over preliminary fastened insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ENRGY 3, Multi-Max FA-3, H-Shield, AC Foam-II Minimum 1.5" thick	N/A	N/A
<u>Top Insulation Layer (Optional)</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
DensDeck, DensDeck Prime Minimum 1/4" thick	N/A	N/A
Approved High Density Roof Fiberboard Minimum 1/2" thick	N/A	N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Membrane: Solar Brite EV, Solar Brite, Solar Brite EVFB or Solar Brite FB secured through the preliminarily attached insulation as specified below.

Fastening: Trufast #15 EHD Fasteners and Trufast 2-3/4" Barbed Seam Plates (EHD) or Trufast #21 SHD Fasteners and Trufast 2-3/4" Barbed Seam Plates (SHD) spaced 12" o.c. within the 6" wide side laps in rows spaced 94" o.c. The roof cover side laps are sealed with a minimum 1.5" heat weld.

Maximum Design Pressures: -45 psf. (See General Limitation #7)



Membrane Type: Single Ply, KEE

Deck Type 2I: Steel, Insulated

Deck Description: 18-22 ga., ASTM A653 Grade 80, steel deck attached to structural steel supports spaced max. 6 ft o.c. attached with 12-24 x 1¼ HWH Impax 45 fasteners spaced max. 6" o.c. at supports. Deck side laps secured 24" o.c. with 14x7/8 HWH Lap-S/D fasteners.
This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type D(5): Membrane mechanically attached over preliminary fastened insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ACFoam-II Minimum 1.0" thick	N/A	N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Membrane: Solar Brite EV, Solar Brite, Solar Brite EVFB or Solar Brite FB secured through the preliminarily attached insulation as specified below.

Fastening #1: Deckfast #15 HS fasteners with Dekfast 1.5" x 2.75" Oval Barbed Plates, spaced 12" o.c. within the 5" laps in rows spaced 95" o.c. The side laps are sealed with a minimum 1.5" heat weld.
Maximum Design Pressure –45.0 psf. (See General Limitation #7)

Fastening #2: Deckfast 15 HS fasteners with Dekfast 1.5" x 2.75" Oval Barbed Plates, spaced 6" o.c. within the 5" laps in rows spaced 95" o.c. The side laps are sealed with a minimum 1.5" heat weld.
Maximum Design Pressure -52.5 psf. (See General Limitation #7)

Maximum Design Pressures: See Fastening Options Above



Membrane Type: Single Ply, KEE
Deck Type 2I: Steel Decks, Insulated
Deck Description: 18-22 ga. steel deck
System Type D(6): Membrane mechanically attached over preliminary fastened insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Retarders: Any UL or FM approved vapor retarder applied to the roof deck or over a base layer of insulation.
(Optional)

Fire Barrier: Min. ¼" DensDeck or DensDeck Prime attached with 4 fasteners per 4' x 8' sheet.
(Optional)

One or more layers of the following insulations:

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ACFoam-II, H-Shield Minimum 1" thick	N/A	N/A
ENRGY 3, H-Shield Minimum 1.4" thick	N/A	N/A
Ultra-Max, ACFoam Composite, EnergyGuard RA Composite, Thermarroof Composite-3, ENRGY-3 Composite Minimum 1.5" thick	N/A	N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Membrane: Solar Brite EV or Solar Brite roof cover attached through the preliminary fastened insulation to the deck as specified below:

Fastening #1: Fasten with OMG ASAP Fasteners spaced 18" o.c. through the 3.5" head laps or fastening tabs spaced 48" o.c. Laps are sealed with 1.5-inch heat weld.
Maximum Design Pressure: -45 psf (See General Limitation #9.)

Fastening #2: Fasten with OMG ASAP Fasteners spaced 6" o.c. through the 3.5" head laps or fastening tabs spaced 98" o.c. Laps are sealed with 1.5-inch heat weld.
Maximum Design Pressure: -45 psf (See General Limitation #9.)



Fastening #3: Fasten with OMG ASAP Fasteners spaced 6" o.c. through the top of the roof cover spaced at maximum intervals of 9 feet. Fastener rows are sealed by either welding a 6" cover strip or prefabricated 4.5" surface tab (closed lap configuration) over the fasteners. The edge of the stripping and/or surface tabs shall be welded a minimum of 1". Laps are sealed with 1.5-inch heat weld .

Maximum Design Pressure: –52.5 psf (See General Limitation #9.)

Fastening #4: Fasten with Dekfast 15 HS fasteners and stress plates spaced 12" o.c. through the 3.5" head laps or fastening tabs spaced 53" o.c. Laps are sealed with 1.5-inch heat weld.

Maximum Design Pressure: –52.5 psf (See General Limitation #9.)

Maximum Design Pressures:

See Fastenings Options Above

Membrane Type: Single Ply, KEE

Deck Type 2I: Steel, Insulated

Deck Description: 18-22 ga., ASTM A653 SS/A1008 SS Grade 80 Steel deck attached to structural supports spaced max. 6 ft o.c. attached with ITW Buildex Traxx/5 fasteners spaced max. 6 in. o.c. at supports (one fastener was installed at each bearing attachment). Deck side laps secured with ITW Buildex Traxx/1 fasteners spaced max. 24" o.c.
This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type D(7): Membrane mechanically attached over preliminary fastened insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ENRGY 3, Multi-Max FA-3, H-Shield, ACFoam-II Minimum 1.5" thick	N/A	N/A
<u>Top Insulation Layer (Optional)</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
DensDeck, DensDeck Prime Minimum 1/4" thick	N/A	N/A
Approved High Density Roof Fiberboard Minimum 1/2" thick	N/A	N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Membrane: Solar Brite EV, Solar Brite, Solar Brite EVFB or Solar Brite FB secured through the preliminarily attached insulation as specified below.

Fastening: Trufast #15 EHD Fasteners and Trufast 2-3/4" Barbed Seam Plates (EHD) or Trufast #21 SHD Fasteners and Trufast 2-3/4" Barbed Seam Plates (SHD) spaced 12" o.c. within the 6" wide side laps in rows spaced 94" o.c. The roof cover side laps are sealed with a minimum 1.5" heat weld.

Maximum Design Pressures: -45 psf. (See General Limitation #7)



Membrane Type: Single Ply, KEE

Deck Type 2I: Steel Decks, Insulated

Deck Description: Min. 22 ga., ASTM A653 or A1008 SS Grade 80 steel deck secured to structural supports spaced maximum 5 ft o.c.. attached with Traxx/5 fasteners spaced 6" o.c. Deck side laps are secured with Traxx/1 fasteners spaced 30" o.c.
This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type D(8): Membrane mechanically attached over preliminary fastened insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Any approved polyisocyanurate Listed in Table 2 Minimum 1.5" thick	N/A	N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Membrane: Solar Brite EV or Solar Brite secured through the preliminarily attached insulation as specified below.

Fastening: Dekfast fasteners with Dekfast Galvalume Steel Round 2-3/8" 20-Ga. Barbed Plates or Dekfast 15 HS fasteners and Dekfast Isofast IF-2.375-AT Membrane Plate, spaced 6" o.c. within the 5" open laps in rows spaced 144.0" o.c., or installed through integral 3-1/2" fastening tab. The outside 1.5" of the lap is heat welded.

Maximum Design Pressures: -45 psf. (See General Limitation #7)



Membrane Type: Single Ply, KEE

Deck Type 2I: Steel Decks, Insulated

Deck Description: 18-22 ga. ASTM A 611, Grade 80 steel deck secured to structural supports spaced maximum 6 ft o.c. fastened with ITW Buildex Traxx/5 at a maximum spacing of 6" o.c. Side laps shall be fastened with Traxx/1 screws at a maximum spacing of 30 inches o.c.
This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type D(9): Membrane mechanically attached over preliminary fastened insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Retarders: Any UL or FM approved vapor retarder applied to the roof deck or over a base layer of insulation.
(Optional)

Fire Barrier: Min. 1/4" DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board attached with 4 fasteners per 4' x 8' sheet.
(Optional)

One or more layers of the following insulations:

<u>Insulation Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener</u> <u>Density/ft²</u>
Any approved polyisocyanurate Listed in Table 2 Minimum 1.5" thick	N/A	N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Membrane: Solar Brite EV or Solar Brite secured through the preliminarily attached insulation as specified below.

Fastening: Dekfast 15 HS fasteners with plates spaced 18" o.c. within the 5" open laps in rows spaced 51" o.c. The outside 1.5" of the lap is heat welded.

Maximum Design Pressures: -45 psf. (See General Limitation #7)



Membrane Type: Single Ply, KEE

Deck Type 2I: Steel Decks, Insulated

Deck Description: Min. 18-22 ga., (*See Specific Deck type below*) steel deck fastened to steel support at a maximum span of 6' o.c. Steel deck shall be fastened with SFS Intec Impax 5 or ITW Buildex Traxx/5 at a maximum spacing of 6" o.c. Side laps shall be fastened with SFS Intec 1/4-14 Lap Tek or Traxx/1 screws at a maximum spacing of 30 inches o.c.
This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type D(10): Membrane mechanically attached over preliminary fastened insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Retarders: Any UL or FM approved vapor retarder applied to the roof deck or over a base layer of insulation.
(Optional)

Fire Barrier: Min. 1/4" DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board attached with 4 fasteners per 4' x 8' sheet.
(Optional)

One or more layers of the following insulations:

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Any approved polyisocyanurate Listed in Table 2 Minimum 1.5" thick	N/A	N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Membrane: Solar Brite EV or Solar Brite secured through the preliminarily attached insulation as specified below.

Fastening #1: (*ASTM A1008/A1008M-01a or A653/A653M-01a SS, Grade 80*) Dekfast 15 HS fasteners with plates spaced 12" o.c. in the 5" lap of membrane in rows spaced 72" o.c. The outside 1.5" of the lap is heat welded.
Maximum Design Pressure: -45 psf. (See General Limitation #7)

Fastening #2: (*Type B, Grade 80*) Dekfast 15 HS fasteners with plates spaced 6" o.c. in the 5" lap of membrane in rows spaced 96" o.c. The outside 1.5" of the lap is heat welded.
Maximum Design Pressure: -52.5 psf. (See General Limitation #7)

Maximum Design Pressures: See Fastening Options Above



Membrane Type: Single Ply, KEE

Deck Type 2I: Steel Decks, Insulated

Deck Description: Min. 22 ga., ASTM A653 or A1008 SS Grade 80 steel deck secured to structural supports spaced maximum 4 ft o.c. attached with Traxx/5 fasteners spaced 6" o.c. Deck side laps are secured with Traxx/1 fasteners spaced 30" o.c.
This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type D(11): Membrane mechanically attached over preliminary fastened insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Any approved polyisocyanurate Listed in Table 2 Minimum 1.5" thick	N/A	N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Membrane: Solar Brite EV or Solar Brite secured through the preliminarily attached insulation as specified below.

Fastening: Dekfast fasteners with Dekfast Galvalume Steel Round 2-3/8" 20-Ga. Barbed Plates or Dekfast 15 HS fasteners and Dekfast Isofast IF-2.375-AT Membrane Plate, spaced 6" o.c. through the top of the roof cover in rows spaced 144.0" o.c.. Rows are sealed by either welding a 6" cover strip or prefabricated 4.5" surface tab (closed lap configuration) over the fasteners. The edge of tab or both edges of cover strip are heat welded min. 1.5". The outside 1.5" of the lap is heat welded.

Maximum Design Pressures: -52.5 psf. (See General Limitation #7)



Membrane Type: Single Ply, KEE

Deck Type 2I: Steel Decks, Insulated

Deck Description: 18-22 ga., Type B, Grade 33 steel deck fastened to steel support at a maximum span of 6' o.c. Steel deck shall be fastened with SFS Intec Impax 5 or ITW Buildex Traxx/5 at a maximum spacing of 6" o.c. Side laps shall be fastened with SFS Intec ¼-14 Lap Tek or Traxx/1 screws at a maximum spacing of 30 inches o.c.
This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type D(12): Membrane mechanically attached over preliminary fastened insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Retarders: Any UL or FM approved vapor retarder applied to the roof deck or over a base layer of insulation.
(Optional)

Fire Barrier: Min. ¼" DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board attached with 4 fasteners per 4' x 8' sheet.
(Optional)

One or more layers of the following insulations:

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Any approved polyisocyanurate Listed in Table 2 Minimum 1.5" thick	N/A	N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Membrane: Solar Brite EV or Solar Brite secured through the preliminarily attached insulation as specified below.

Fastening #1: Dekfast 15 HS fasteners with plates spaced 12" o.c. in the 5" lap of membrane in rows spaced 51" o.c. The outside 1.5" of the lap is heat welded.
Maximum Design Pressure: -52.5 psf. (See General Limitation #7)

Fastening #2: Dekfast 15 HS fasteners with plates spaced 6" o.c. in the 5" lap of membrane in rows spaced 51" o.c. The outside 1.5" of the lap is heat welded.
Maximum Design Pressure: -60 psf. (See General Limitation #7)

Maximum Design Pressures: See Fastening Options Above



Membrane Type: Single Ply, KEE

Deck Type 2I: Steel Decks, Insulated

Deck Description: 18-20 ga., Grade 33, Type B steel deck or 18-22 ga., Type B, Grade 80 steel deck fastened to steel support at a maximum span of 6' o.c. Steel deck shall be fastened with SFS Intec Impax 5 or ITW Buildex Traxx/5 at a maximum spacing of 6" o.c. Side laps shall be fastened with SFS Intec ¼-14 Lap Tek or Traxx/1 screws at a maximum spacing of 30 inches o.c.
This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type D(13): Membrane mechanically attached over preliminary fastened insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Retarders: Any UL or FM approved vapor retarder applied to the roof deck or over a base layer of (Optional) insulation.

Fire Barrier: Min. ¼" DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board attached (Optional) with 4 fasteners per 4' x 8' sheet.

One or more layers of the following insulations:

<u>Insulation Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener</u> <u>Density/ft²</u>
Any approved polyisocyanurate Listed in Table 2 Minimum 1.5" thick	N/A	N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Membrane: Solar Brite EV or Solar Brite secured through the preliminarily attached insulation as specified below.

Fastening #1: Dekfast 15 HS fasteners with plates spaced 12" o.c. in the 5" lap of membrane in rows spaced 51" o.c. The outside 1.5" of the lap is heat welded.
Maximum Design Pressure: -52.5 psf. (See General Limitation #7)

Fastening #2: Dekfast 15 HS fasteners with plates spaced 6" o.c. in the 5" lap of membrane in rows spaced 51" o.c. The outside 1.5" of the lap is heat welded.
Maximum Design Pressure: -67.5 psf. (See General Limitation #7)

Maximum Design Pressures: See Fastening Options Above



Membrane Type: Single Ply, KEE

Deck Type 2I: Steel Decks, Insulated

Deck Description: 18-22 ga. Type B, Grade 80 steel deck secured to structural supports spaced maximum 6 ft o.c. fastened with ITW Buildex Traxx/5 at a maximum spacing of 6" o.c. Side laps shall be fastened with Traxx/1 screws at a maximum spacing of 30 inches o.c.
This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type D(14): Membrane mechanically attached over preliminary fastened insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Retarders: Any UL or FM approved vapor retarder applied to the roof deck or over a base layer of insulation.
(Optional)

Fire Barrier: Min. 1/4" DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board attached with 4 fasteners per 4' x 8' sheet.
(Optional)

One or more layers of the following insulations:

<u>Insulation Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener</u> <u>Density/ft²</u>
Any approved polyisocyanurate Listed in Table 2 Minimum 1.5" thick	N/A	N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Membrane: Solar Brite EV or Solar Brite secured through the preliminarily attached insulation as specified below.

Fastening: Dekfast 15 HS fasteners with plates spaced 12" o.c. in the 5" open laps in rows spaced 51" o.c. The outside 1.5" of the lap is heat welded.

Maximum Design Pressures: -60 psf. (See General Limitation #7)



Membrane Type: Single Ply, KEE

Deck Type 2I: Steel, Insulated

Deck Description: Min. 22 ga., Type B, Grade 80 steel deck secured to structural supports spaced maximum 4 ft-6 in. o.c. with ITW Buildex Traxx/5 fasteners spaced max. 6 in. o.c. at each rib. Deck side laps secured with ITW Buildex Traxx/1 fasteners spaced max. 24" o.c.
This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type D(15): Membrane mechanically attached over preliminary fastened insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
H-Shield Minimum 1.5" thick	N/A	N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Membrane: Solar Brite EV, Solar Brite, Solar Brite EVFB or Solar Brite FB secured through the preliminarily attached insulation using Dekfast 15 HS fasteners with Dekfast 1.5" x 2.5" Oval Barbed Plates or Dekfast 1.5" x 2.75" Oval Barbed Plates, spaced 6" o.c. within the 6" laps in rows spaced 104.5" o.c. The side laps are sealed with a minimum 1.5" heat weld.

Maximum Design Pressures: -60.0 psf (See General Limitation #7).



Membrane Type: Single Ply, KEE

Deck Type 2I: Steel, Insulated

Deck Description: Min 22 ga., ASTM A653, Grade 33 steel deck attached to structural steel supports spaced max. 4 ft-6 in. o.c. with ITW Buildex Traxx/5 fasteners spaced max. 6 in. o.c. at each rib. Deck side laps secured with ITW Buildex Traxx/1 fasteners spaced max. 24" o.c.
This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type D(16): Membrane mechanically attached over preliminary fastened insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ENRGY 3 Minimum 1.5" thick	N/A	N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Membrane: Solar Brite EV, Solar Brite, Solar Brite EVFB or Solar Brite FB secured through the preliminarily attached insulation using Dekfast 15 HS fasteners with Dekfast 1.5" x 2.5" Oval Barbed Plates or Dekfast 1.5" x 2.75" Oval Barbed Plates, spaced 6" o.c. within the 5" laps in rows spaced 69" o.c. The side laps are sealed with a minimum 1.5" heat weld.

Maximum Design Pressures: -60.0 psf (See General Limitation #7).



Membrane Type: Single Ply, KEE

Deck Type 2I: Steel, Insulated

Deck Description: Min. 22 ga. Type B, Grade 80 steel deck attached to structural supports spaced max. 5 ft o.c. with ITW Buildex Traxx/5 fasteners spaced max. 6 in. o.c. at supports (one fastener was installed at each bearing attachment). Deck side laps secured with ITW Buildex Traxx/1 fasteners spaced max. 24" o.c.
This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type D(17): Membrane mechanically attached over preliminary fastened insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ENRGY 3, Multi-Max FA-3, H-Shield, ACFoam-II Minimum 1.5" thick	N/A	N/A
<u>Top Insulation Layer (Optional)</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
DensDeck, DensDeck Prime Minimum 1/4" thick	N/A	N/A
Approved High Density Roof Fiberboard Minimum 1/2" thick	N/A	N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Membrane: Solar Brite EV, Solar Brite, Solar Brite EVFB or Solar Brite FB secured through the preliminarily attached insulation as specified below.

Fastening: Trufast #15 EHD Fasteners and Trufast 2-3/4" Barbed Seam Plate (EHD) or Trufast #21 SHD Fasteners and Trufast 2-3/4" Barbed Seam Plates (SHD) spaced 6" o.c. within the 6" wide side laps in rows spaced 94" o.c. The roof cover side laps are sealed with a minimum 1.5" heat weld.

Maximum Design Pressures: -67.5 psf. (See General Limitation #7)



Membrane Type: Single Ply, KEE

Deck Type 2I: Steel Decks, Insulated

Deck Description: 18- 22 ga., Type B, Grade 80 steel deck attached to structural supports spaced maximum 6 ft o.c. with Traxx/5 fasteners spaced 6" o.c. Deck side laps are secured with Traxx/1 fasteners spaced 30" o.c.
This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type D(18): Membrane mechanically attached over preliminary fastened insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Any approved polyisocyanurate Listed in Table 2 Minimum 1.5" thick	N/A	N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Membrane: Solar Brite EV or Solar Brite secured through the preliminarily attached insulation as specified below.

Fastening: Dekfast fasteners with Dekfast Galvalume Steel Round 2-3/8" 20-Ga. Barbed Plates or Dekfast 15 HS fasteners and Dekfast Isofast IF-2.375-AT Membrane Plate, spaced 6" o.c. within the 5" open laps in rows spaced 72.0" o.c., or installed through integral 3-1/2" fastening tab. The outside 1.5" of the lap is heat welded.

Maximum Design Pressures: -67.5 psf. (See General Limitation #7)



Membrane Type: Single Ply, KEE

Deck Type 2I: Steel Decks, Insulated

Deck Description: Min. 18 ga. Type B, Grade 80 steel deck attached to structural supports spaced maximum 6 ft o.c. with ITW Buildex Traxx/5 at a maximum spacing of 6" o.c. Side laps shall be fastened with Traxx/1 screws at a maximum spacing of 30 inches o.c.
This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type D(19): Membrane mechanically attached over preliminary fastened insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Retarders: Any UL or FM approved vapor retarder applied to the roof deck or over a base layer of insulation.
(Optional)

Fire Barrier: Min. 1/4" DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board attached with 4 fasteners per 4' x 8' sheet.
(Optional)

One or more layers of the following insulations:

<u>Insulation Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener</u> <u>Density/ft²</u>
Any approved polyisocyanurate Listed in Table 2 Minimum 1.5" thick	N/A	N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Membrane: Solar Brite EV or Solar Brite secured through the preliminarily attached insulation as specified below.

Fastening: Fasten with Dekfast 15 HS fasteners and plates spaced 6" o.c. through the top of the roof cover spaced at maximum intervals of 104.5" Fastener rows are sealed by either welding a 6" cover strip or prefabricated 4.5" surface tab.(closed lap configuration) over the fasteners. The edge of the stripping and/or surface tabs shall be welded a minimum of 1". Laps are sealed with 1.5-inch heat weld.

Maximum Design Pressures: -75 psf. (See General Limitation #7)

Membrane Type: Single Ply, KEE

Deck Type 2I: Steel Decks, Insulated

Deck Description: Min. 22 ga., Type B, Grade 80 steel decking placed over minimum 0.25" thick structural supports having maximum 5 ft spans. Deck shall be anchored with ITW Buildex Traxx/4 or Traxx/5 fasteners spaced at maximum 6" o.c. at supports. Deck side laps shall be secured with ITW Buildex Traxx/1 fasteners spaced at a maximum 18" o.c.
This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type D(20): Membrane mechanically attached over preliminary fastened insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Retarders: (Optional) Any UL or FM approved vapor retarder applied to the roof deck or over a base layer of insulation.

Fire Barrier: (Optional) Min. 1/4" DensDeck or DensDeck Prime attached with 4 fasteners per 4' x 8' sheet.

One or more layers of the following insulations:

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Any approved polyisocyanurate Listed in Table 2 Minimum 1" thick	N/A	N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Membrane: Solar Brite EV or Solar Brite roof cover attached through the presecured insulation to the deck using Dekfast 15 HS fasteners and plates spaced 6" o.c. through the tabs spaced a maximum of 51" o.c. Laps are sealed with 1.5-inch heat weld.
Maximum Design Pressures:-75 psf (See General Limitation #7)

Or

Solar Brite TopSider system consisting of Solar Brite EV or Solar Brite attached using Dekfast 15 HS fasteners and plates spaced 6" o.c. through the top of the membrane spaced at intervals of 104.5". Laps are sealed with 1.5-inch heat weld.
Maximum Design Pressures:-79.8 psf (See General Limitation #7)

Maximum Design Pressures: See Membrane attachment above.



Membrane Type: Single Ply, KEE

Deck Type 2I: Steel, Insulated

Deck Description: Min. 18 ga., Type B, Grade 80 Steel deck attached to structural supports spaced max. 6 ft o.c. with ITW Buildex Traxx/5 fasteners spaced max. 6 in. o.c. at each rib. Deck side laps secured with ITW Buildex Traxx/1 fasteners spaced max. 24" o.c.
This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type D(21): Membrane mechanically attached over preliminary fastened insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
H-Shield Minimum 1.5" thick	N/A	N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Membrane: Solar Brite EV, Solar Brite, Solar Brite EVFB or Solar Brite FB secured through the preliminarily attached insulation as specified below.

Fastening: Dekfast 15 HS fasteners with Dekfast 1.5" x 2.5" Oval Barbed Plates or Dekfast 1.5" x 2.75" Oval Barbed Plates, spaced 6" o.c. within the 6" closed laps in rows spaced 94" o.c. The side laps are sealed with a minimum 1.5" heat weld.

Maximum Design Pressures: -82.5 psf. (See General Limitation #7)



Membrane Type: Single Ply, KEE

Deck Type 2I: Steel, Insulated

Deck Description: 18-22 ga. Type B, Grade 80 Steel deck attached to structural supports spaced max. 6 ft o.c. with ITW Buildex Traxx/5 fasteners spaced max. 6 in. o.c. at each rib. Deck side laps secured with ITW Buildex Traxx/1 fasteners spaced max. 24" o.c.
This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type D(22): Membrane mechanically attached over preliminary fastened insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
H-Shield Minimum 1.5" thick	N/A	N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Membrane: Solar Brite EV, Solar Brite, Solar Brite EVFB or Solar Brite FB secured through the preliminarily attached insulation as specified below.

Fastening: Dekfast 15 HS fastener with Dekfast 1.5" x 2.5" Oval Barbed Plates or Dekfast 1.5" x 2.75" Oval Barbed Plates, spaced 6" o.c. within the 6" closed laps in rows spaced 47" o.c. The side laps are sealed with a minimum 1.5" heat weld.

Maximum Design Pressures: -112.5 psf. (See General Limitation #7)



STEEL DECK SYSTEM LIMITATIONS:

1. If mechanical attachment to the structural deck through the lightweight insulating concrete is proposed, a field withdrawal resistance testing shall be performed to determine equivalent or enhanced fastener patterns and density. All testing and fastening design shall be in compliance with Testing Application Standard TAS 105 and Roofing Application Standard RAS 117 and/or RAS 137, calculations shall be signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant.
2. For steel deck application where specific deck construction is not referenced: The deck shall be a minimum 22 gage attached with 5/8" puddle welds with weld washers at every flute with maximum deck spans of 5 ft. o.c.

GENERAL LIMITATIONS:

1. Fire classification is not part of this acceptance, refer to a current Approved Roofing Materials Directory for fire ratings of this product.
2. Insulation may be installed in multiple layers. The first layer shall be attached in compliance with Product Control Approval guidelines. All other layers shall be adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq., or mechanically attached using the fastening pattern of the top layer
3. All standard panel sizes are acceptable for mechanical attachment. When applied in approved asphalt, panel size shall be 4' x 4' maximum.
4. An overlay and/or recovery board insulation panel is required on all applications over closed cell foam insulations when the base sheet is fully mopped. If no recovery board is used the base sheet shall be applied using spot mopping with approved asphalt, 12" diameter circles, 24" o.c.; or strip mopped 8" ribbons in three rows, one at each sidelap and one down the center of the sheet allowing a continuous area of ventilation. Encircling of the strips is not acceptable. A 6" break shall be placed every 12' in each ribbon to allow cross ventilation. Asphalt application of either system shall be at a minimum rate of 12 lbs./sq. **Note: Spot attached systems shall be limited to a maximum design pressure of -45 psf.**
5. Fastener spacing for insulation attachment is based on a Minimum Characteristic Force (F') value of 275 lbf., as tested in compliance with Testing Application Standard TAS 105. If the fastener value, as field-tested, are below 275 lbf. insulation attachment shall not be acceptable.
6. Fastener spacing for mechanical attachment of anchor/base sheet or membrane attachment is based on a minimum fastener resistance value in conjunction with the maximum design value listed within a specific system. Should the fastener resistance be less than that required, as determined by the Building Official, a revised fastener spacing, prepared, signed and sealed by a Florida Registered Engineer, Architect, or Registered Roof Consultant may be submitted. Said revised fastener spacing shall utilize the withdrawal resistance value taken from Testing Application Standards TAS 105 and calculations in compliance with Roofing Application Standard RAS 117.
7. Perimeter and corner areas shall comply with the enhanced uplift pressure requirements of these areas. Fastener densities shall be increased for both insulation and base sheet as calculated in compliance with Roofing Application Standard RAS 117 and/or RAS 137. Calculations prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant **(When this limitation is specifically referred within this NOA, General Limitation #9 will not be applicable.)**
8. All attachment and sizing of perimeter nailers, metal profile, and/or flashing termination designs shall conform with Roofing Application Standard RAS 111 and applicable wind load requirements.
9. The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners and corners). **(When this limitation is specifically referred within this NOA, General Limitation #7 will not be applicable.)**
10. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 61G20-3 of the Florida Administrative Code.

END OF THIS ACCEPTANCE



NOA No.: 15-1007.12
Expiration Date: 01/05/21
Approval Date: 12/31/15
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